

Anti-AK2 antibody [EPR11387(B)] ab157206

KO 評価済 リコンビナント RabMAb

1 References 画像数 6

製品の概要

製品名	Anti-AK2 antibody [EPR11387(B)]
製品の詳細	Rabbit monoclonal [EPR11387(B)] to AK2
由来種	Rabbit
アプリケーション	適用あり: Flow Cyt (Intra), WB, IHC-P 適用なし: ICC/IF or IP
種交差性	交差種: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HEK-293, HepG2 and HL-60 cell lysates; Fetal kidney, heart and liver lysates; Recombinant human AK2 protein. IHC-P: Human heart and liver tissues. Flow Cyt (intra): HeLa cells.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at -20°C.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
精製度	Tissue culture supernatant

ポリ/モノ	モノクローナル
クローン名	EPR11387(B)
アイソタイプ	IgG

アプリケーション

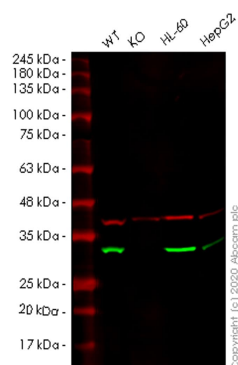
The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab157206の使用に適用されます
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Predicted molecular weight: 26 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

追加情報 Is unsuitable for ICC/IF or IP.

ターゲット情報

機能	Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. This small ubiquitous enzyme involved in energy metabolism and nucleotide synthesis that is essential for maintenance and cell growth. Plays a key role in hematopoiesis.
組織特異性	Present in most tissues. Present at high level in heart, liver and kidney, and at low level in brain, skeletal muscle and skin. Present in thrombocytes but not in erythrocytes, which lack mitochondria. Present in all nucleated cell populations from blood, while AK1 is mostly absent. In spleen and lymph nodes, mononuclear cells lack AK1, whereas AK2 is readily detectable. These results indicate that leukocytes may be susceptible to defects caused by the lack of AK2, as they do not express AK1 in sufficient amounts to compensate for the AK2 functional deficits (at protein level).
関連疾患	Defects in AK2 are the cause of reticular dysgenesis (RDYS) [MIM:267500]; also known as aleukocytosis. RDYS is the most severe form of inborn severe combined immunodeficiencies (SCID) and is characterized by absence of granulocytes and almost complete deficiency of lymphocytes in peripheral blood, hypoplasia of the thymus and secondary lymphoid organs, and lack of innate and adaptive humoral and cellular immune functions, leading to fatal septicemia within days after birth. In bone marrow of individuals with reticular dysgenesis, myeloid differentiation is blocked at the promyelocytic stage, whereas erythro- and megakaryocytic maturation is generally normal. In addition, affected newborns have bilateral sensorineural deafness. Defects may be due to its absence in leukocytes and inner ear, in which its absence can not be compensated by AK1.
配列類似性	Belongs to the adenylate kinase family. AK2 subfamily.
細胞内局在	Mitochondrion intermembrane space.



Western blot - Anti-AK2 antibody [EPR11387(B)]
(ab157206)

All lanes : Anti-AK2 antibody [EPR11387(B)] (ab157206) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate

Lane 2 : AK2 knockout HEK293T cell lysate

Lane 3 : HL-60 cell lysate

Lane 4 : HepG2 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

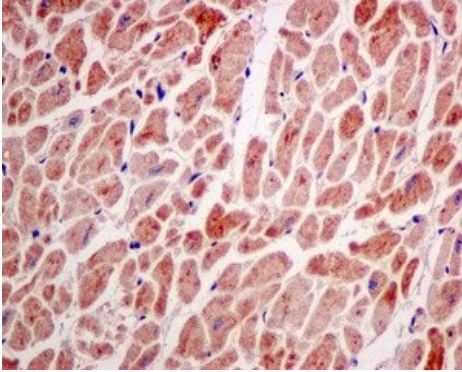
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Predicted band size: 26 kDa

Observed band size: 30 kDa

Lanes 1-4: Merged signal (red and green). Green - ab157206 observed at 30 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

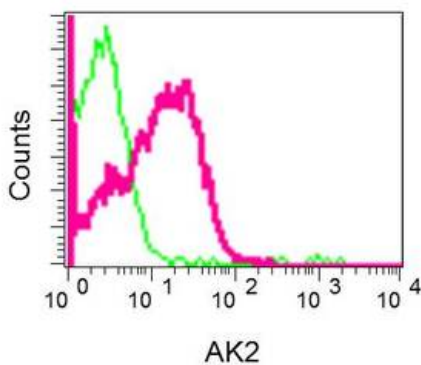
ab157206 Anti-AK2 antibody [EPR11387(B)] was shown to specifically react with AK2 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line [ab266539](#) (knockout cell lysate [ab257825](#)) was used. Wild-type and AK2 knockout samples were subjected to SDS-PAGE. ab157206 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated at room temperature for 2.5 hours at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AK2 antibody
[EPR11387(B)] (ab157206)

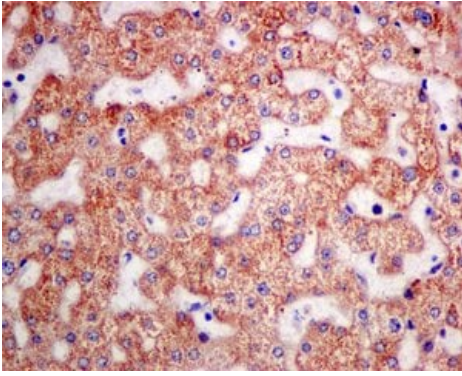
Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human heart tissue, labeling AK2 using ab157206 at a 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-AK2 antibody
[EPR11387(B)] (ab157206)

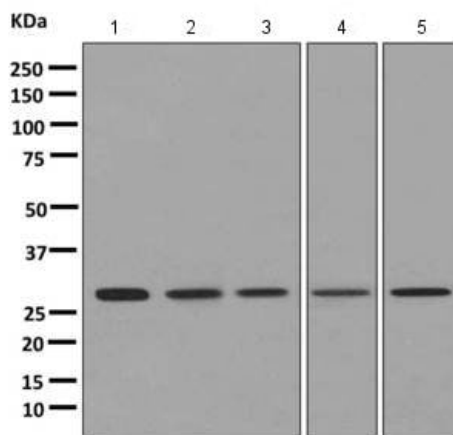
Intracellular Flow Cytometry analysis of permeabilized HeLa cells labeling AK2 (red), using ab157206 at a 1/10 dilution, and negative control cells probed with a Rabbit IgG (green)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AK2 antibody [EPR11387(B)] (ab157206)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human liver tissue, labeling AK2 using ab157206 at a 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-AK2 antibody [EPR11387(B)] (ab157206)

All lanes : Anti-AK2 antibody [EPR11387(B)] (ab157206) at 1/1000 dilution

Lane 1 : HepG2 lysate

Lane 2 : fetal kidney lysate

Lane 3 : fetal heart lysate

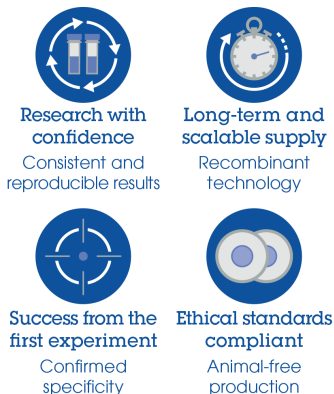
Lane 4 : HeLa lysate

Lane 5 : fetal liver lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 26 kDa

Why choose a recombinant antibody?



Anti-AK2 antibody [EPR11387(B)] (ab157206)

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